

Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Please type a plus sign (+) inside this box ^

Substitute for Form 1449A/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	1	of	2	Attorney Docket No.	TI-28441A
-------	---	----	---	---------------------	-----------

U.S. PATENT DOCUMENTS					
Exam. Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)
		Number	Kind Code ² (if known)		
91	AA	5,329,547		Ling	07/12/1994
	AB				
	AC				
	AD				
	AE				
	AF				
	AG				
	AH				
	AI				
	AJ				
	AK				
	AL				
	AM				
	AN				
	AO				

FOREIGN PATENT DOCUMENTS					
Exam. Initials ⁴	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)
		Office ³	Number ⁴		
91	BA	EP	0 767 546 A2	AT&T Corp.	09/04/1997
M	BB		WO 99/14871	AT&T Wireless Services, Inc.	25/03/1999
a	BC		WO 99/23766	AT&T Wireless Services, Inc.	14/05/1999
	BD				
	BE				
	BF				
	BG				
	BH				
	BI				
	BJ				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box

Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete If Known	
Sheet	2	of	2	Application Number	10/601,868
				Filing Date	06/23/2003
				First Named Inventor	Anand G. Dabak, et al.
				Group Art Unit	-2684- 2691
				Examiner Name	-TBD- J. Corneilus
				Attorney Docket No.	TI-28441A

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Exam. Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
SP	CA	"A Simple Transmit Diversity Technique for Wireless Communications", IEEE Journal on Selected Areas in Communications, IEEE Inc. New York, US, vol. 16, no. 8, October 1998, pp. 1451-1458, XP002100058, ISSN: 0733-8716			
N	CB	"Channel Estimation Using Time Multiplexed Pilot Symbols for Coherent Rake Combining for DS-CDMA Mobile Radio", Personal, Indoor and Mobile Radio Communications, 1997. Waves of the Year 2000. PIMRC '97., The 8th IEEE International Symposium on Helsinki, Finland 1-4 Sept. 1997 New York, NY, USA, IEEE, US 1/09/1997, pp. 954-958, XP010247589, ISBN: 0-7803-3871-5			
M	CC	"New Detection Schemes for Transmit Diversity with no Channel Estimation", Tarokh, V., et al., Universal Personal Communications, 1998. ICUPC '98. IEEE 1998 International conference on Florence, Italy, 5-9 Oct. 1998, New York, NY, USA, IEEE, US 5/10/1998, pp. 917-920, XP010315028, ISBN: 0-7803-5106-1			
	CD				
	CE				
	CF				
	CG				
	CH				
	CI				
	CJ				
	CK				
	CL				
	CM				
	CN				
	CO				
	CP				
	CQ				
	CR				

Examiner Signature	<i>Om Brinkler</i>	Date Considered	6-2-05
--------------------	--------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box +

Approved for use through 10/31/2002. OMB 0851-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete If Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;">TBD</td> </tr> <tr> <td>Filing Date</td> <td>Herewith</td> </tr> <tr> <td>First Named Inventor</td> <td>Anand G. Dabak, et al.</td> </tr> <tr> <td>Group Art Unit</td> <td>TBD 2637</td> </tr> <tr> <td>Examiner Name</td> <td>TBD J CORNIEWS</td> </tr> </table>		Application Number	TBD	Filing Date	Herewith	First Named Inventor	Anand G. Dabak, et al.	Group Art Unit	TBD 2637	Examiner Name	TBD J CORNIEWS
Application Number	TBD														
Filing Date	Herewith														
First Named Inventor	Anand G. Dabak, et al.														
Group Art Unit	TBD 2637														
Examiner Name	TBD J CORNIEWS														
Sheet	1	of	2	Attorney Docket No.	TI-28441A										

U.S. PATENT DOCUMENTS						
Exam. Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
AN	AA	60/099,212		Arthur R. Calderbank, et al.	09/04/1998	Provisional Application
AV	AB	5,228,054		Rueth, et al.	07/13/1993	
AC	AC	5,737,327		Ling, et al.	04/07/1998	
AV	AD	5,581,580		Lindbom, et al.	12/03/1996	
AM	AE	5,912,931		Matsumoto, et al.	06/15/1999	
WV	AF	6,137,843		Chennakeshu, et al.	10/24/2000	
AV	AG	6,185,268 B1		Alamouti, et al.	02/06/2001	
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					

FOREIGN PATENT DOCUMENTS								
Exam. Initials [*]	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ² (if known)				
AN	BA		WO 99/14871		AT&T Wireless Services, Inc.	25/03/1999		
AV	BB		WO 00/14921		AT&T Corp.	16/03/2000		
AV	BC		WO 99/23766 A2		AT&T Wireless Services, Inc.	14/05/1999		
AM	BD		WO 99/23766 A3		AT&T Wireless	14/05/1999		
	BE							
	BF							
	BG							
	BH							
	BI							
	BJ							
	BK							
	BL							

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Please type a plus sign (+) inside this box

Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete If Known	
Sheet	2	Of	2	Application Number	<i>TBD</i>
				Filing Date	<i>Herewith</i>
				First Named Inventor	<i>Anand G. Dabak, et al.</i>
				Group Art Unit	TBD 2637
				Examiner Name	<i>TBD</i> <i>(CORRIELOS</i>
				Attorney Docket No.	<i>TI-28441A</i>

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Exam. Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	²
<i>M</i>	CA	"Report on FPLMTS Radio Transmission Technology Special Group", (round 2 Activity Report). Association of Radio Industries and Business (ARIB), FPLMTS Study Committee, Draft Version E1.1, 01/10/1997, 224 pages	
<i>M</i>	CB	"Proposed Wideband CDMA (W-CDMA)", Association of Radio Industries and Businesses (ARIB), Japan, 01/1997, 213 pages	
	CC		
	CD		
	CE		
	CF		
	CG		
	CH		
	CI		
	CJ		
	CK		
	CL		
	CM		
	CN		
	CO		
	CP		
	CQ		
	CR		

Examiner Signature	<i>Am. Corriels</i>	Date Considered	<i>6-2-05</i>
--------------------	---------------------	-----------------	---------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.